FINAL

ENVIRONMENTAL IMPACT STATEMENT

VOLUME IV

DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO

PREPARED JOINTLY BY

U. S. DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY (LEAD BUREAU)

BUREAU OF LAND MANAGEMENT

AND

U. S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

U. E. McKelvey

DIRECTOR U.S. GEOLOGICAL SURVEY

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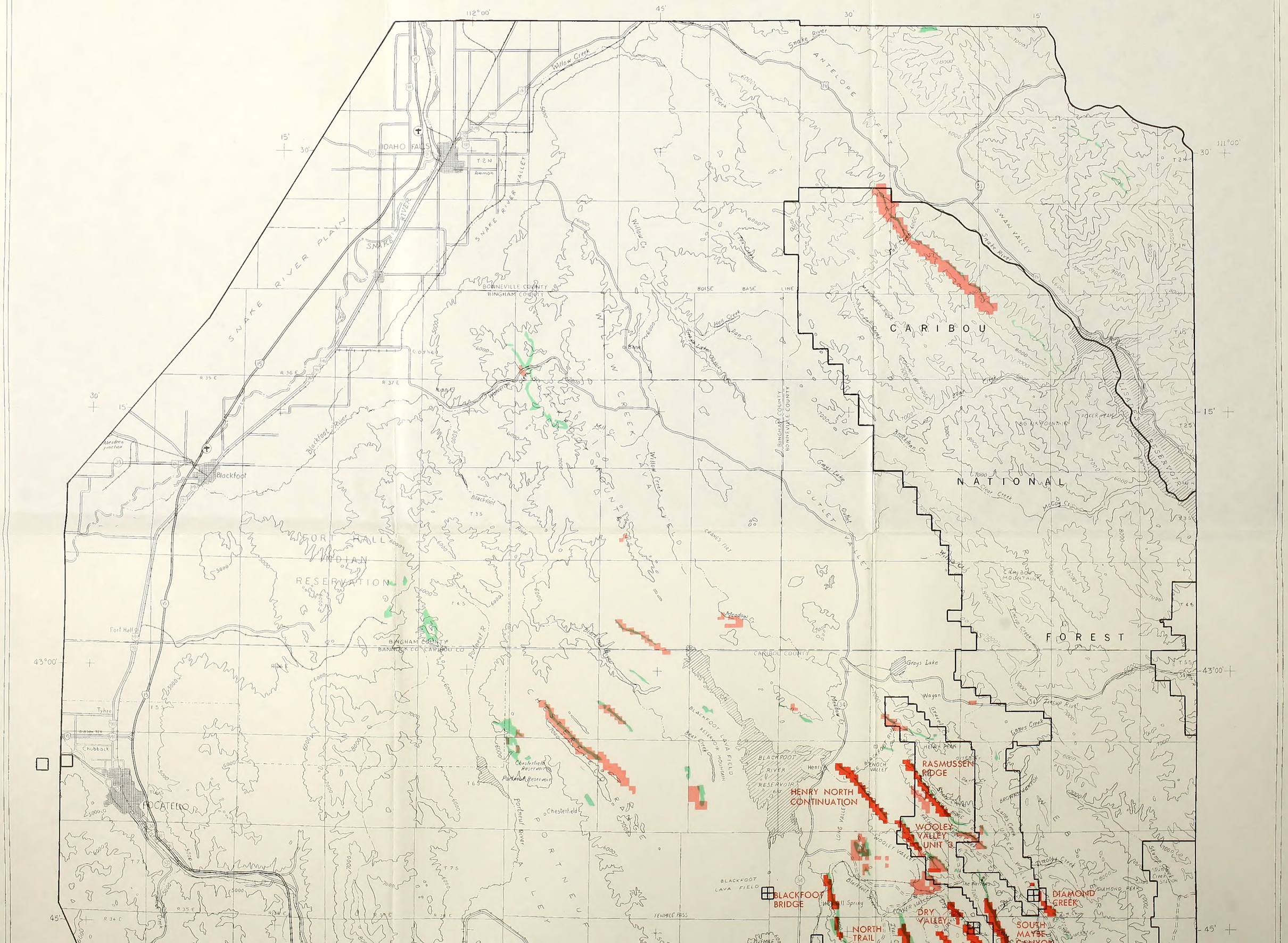
DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 1



HENRY NORTH CONTINUATION
WOOLEY VALLEY UNIT 3
BLACKFOOT BRIDGE
DIAMOND CREEK
DRY VALLEY
NORTH TRAIL CANYON
SOUTH MAYBE CANYON
TRAIL CREEK
CALDWELL CANYON
DRY VALLEY
HUSKY NO. 1
MIDDLE SULPHUR CANYON
CHAMP
SWAN LAKE GULCH
MOUNTAIN FUEL
PARIS-BLOOMINGTON
POCATELLO
Chesterfield
Bancroft
Alexander
Soda Point Reservoir
Hot Springs
Grace
Cove
Downey
Preston
Georgetown
Montpelier Junction
Paris
Bloomington
Saint Charles
BEAR LAKE
BEAR LAKE PLATEAU
CARIBOU COUNTY
FRANKLIN COUNTY
BEAR LAKE COUNTY
Portneuf River
Bear River
Marsh Creek
Dry Valley
Blackfoot Lava Field
Tenmile Pass
Soda Springs
Formation Creek
Sheridan Peak
Paris Peak
Meade Peak
Diamond Peak
Thomas Fork
Montpelier Canyon
Bloomington Canyon
Charles Creek
Marsh Creek
Stauffer Creek
North Creek
Sheridan Creek
Coopers Creek
Sulphur Creek
Swan Lake
Beaver Creek
Tincup Creek
Big Hollow Creek
Spring Creek
Stump Creek
Slug Creek
Willow Creek
Lower Valley
Wooley Valley
Blackfoot River
Meade Peak
Elk Valley
Thomas Fork
Sheridan Siding
Montpelier Junction
Hilmer Siding
Ovid
Georgetown
Bear River
Bear Lake
Bear Lake Plateau
Bear Lake County
Caribou County
Franklin County
Bancroft Phosphate Area
Soda Springs Area
Blackfoot Lava Field
Tenmile Pass
Portneuf River Valley
Bear River Valley
Geneva Basin
Bear Lake Basin
Bear Lake Plateau
Wooley Valley
Dry Valley
Elk Valley
Thomas Fork
Montpelier Canyon
Bloomington Canyon
Charles Creek
Marsh Creek
Stauffer Creek
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Swan Lake
Beaver Creek
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Big Hollow Creek
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Lower Valley
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Blackfoot River
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Elk Valley
Thomas Fork
Sheridan Siding
Montpelier Junction
Hilmer Siding
Ovid
Georgetown
Bear River
Bear Lake
Bear Lake Plateau
Bear Lake County
Caribou County
Franklin County
Bancroft Phosphate Area
Soda Springs Area
Blackfoot Lava Field
Tenmile Pass
Portneuf River Valley
Bear River Valley
Geneva Basin
Bear Lake Basin
Bear Lake Plateau

EXPLANATION

Issued leases without mine plans

Outcrops of Phosphoria Formation

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

AREAS FOR WHICH FEDERAL PHOSPHATE LEASES HAVE BEEN ISSUED, SOUTHEASTERN IDAHO

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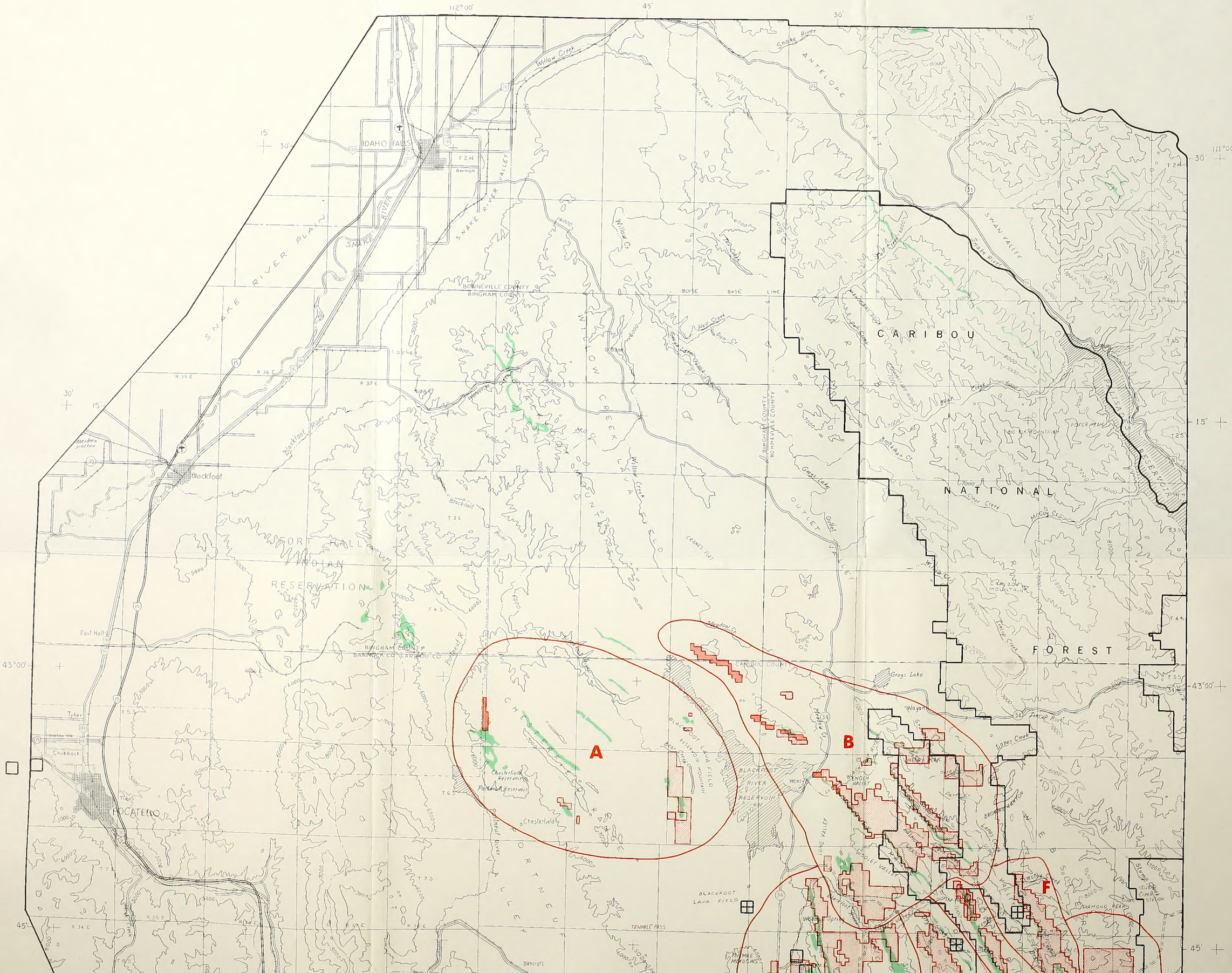
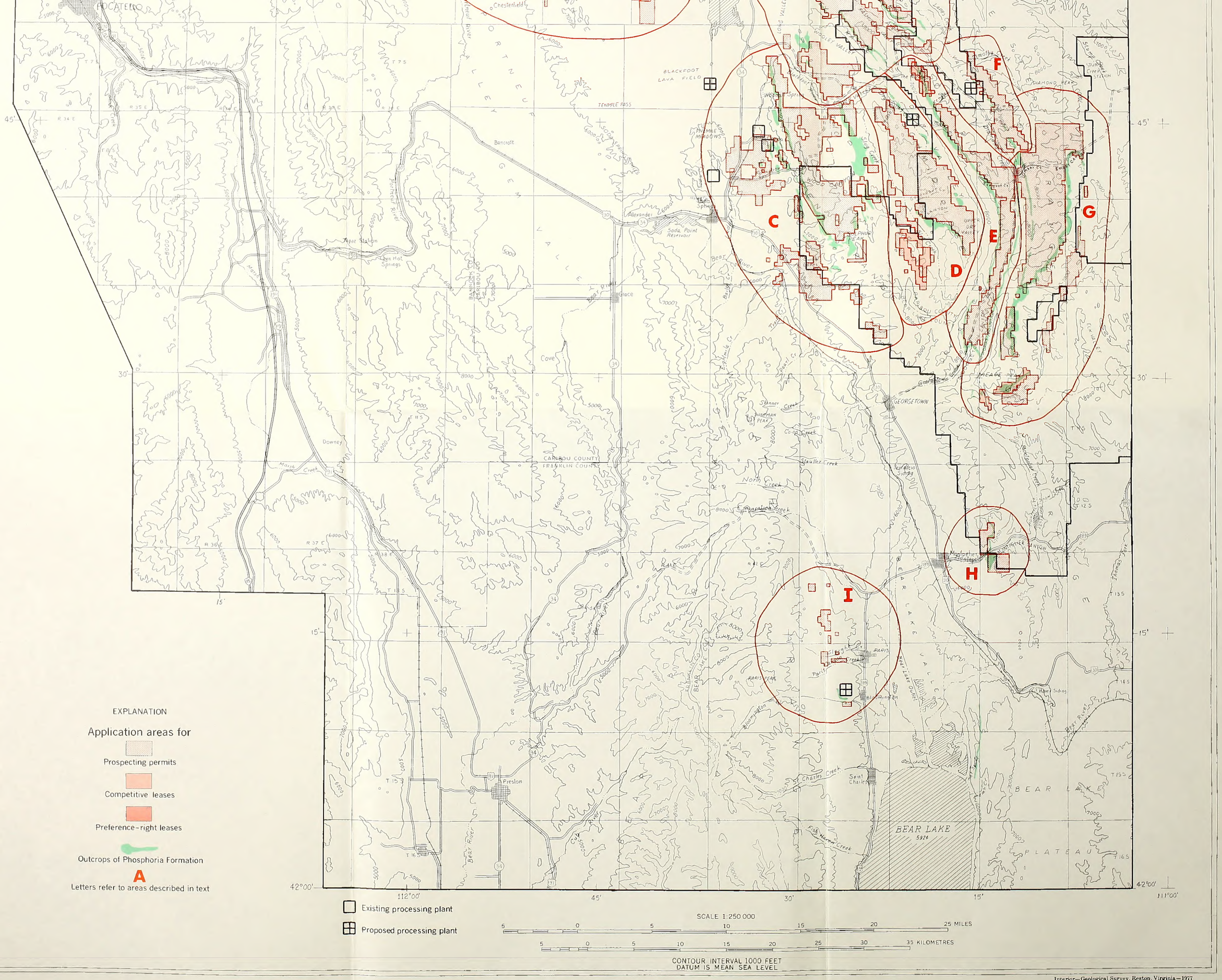
DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 2





EXPLANATION

Application areas for

- Prospecting permits
- Competitive leases
- Preference-right leases
- Outcrops of Phosphoria Formation
- **A** Letters refer to areas described in text

- Existing processing plant
- Proposed processing plant

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

AREAS FOR WHICH PROSPECTING PERMITS, COMPETITIVE LEASES, AND PREFERENCE - RIGHT LEASES HAVE BEEN APPLIED FOR, SOUTHEASTERN IDAHO

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GEOLOGIC MAP OF SODA SPRINGS REGION, SOUTHEASTERN IDAHO

FROM U.S. GEOLOGICAL SURVEY PROFESSIONAL PAPER 646-E

Base from U.S. Geological Survey
1:250,000, Preston, 1955

SCALE 1:125 000

2 0 2 4 6 8 10 MILES

2 0 2 4 6 8 10 KILOMETERS

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100-FOOT INTERVALS
DATUM IS MEAN SEA LEVEL

Geology compiled by S. S. Oriel, 1965–67

Interior—Geological Survey, Reston, Virginia—1977

DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 3

EXPLANATION

Qal — Alluvium
Unconsolidated gravel, sand, and mud

Qc — Colluvium
Includes hillwash, talus, loess, and alluvium in tributary valleys

Qt — Tufa
Porous to spongy white, buff, and yellow calcium carbonate

Qbc — Basaltic cinders

Qb — Basalt
Dark, finely to medium crystalline vesicular, porphyritic, and coarsely crystalline massive olivine basalt. Maximum observed thickness about 300 feet

Qm — Main Canyon Formation of Bright (1967)
Poorly consolidated to unconsolidated silt and marl grading into sand and gravel near valley margins. Maximum thickness exceeds 600 feet

QTr — Rhyolite

Tsl — Salt Lake Formation
Very light gray to white poorly consolidated tuffaceous calcareous siltstone, claystone, sandstone, and conglomerate. About 10,000 feet thick

Kw — Wayan Formation
Red calcareous mudstone and red, buff, and white sandstone and conglomerate. Several hundred-determined thousand feet thick

Kgu, Kgl — Gannett Group
Kgu, upper part. Includes an upper unnamed red mudstone and siltstone unit, a middle thin- to medium-bedded aphanitic gray limestone (Draney Limestone) and a lower conglomeratic unit (Bechler Conglomerate) of red and white conglomerate and sandstone and red mudstone. About 2,000–3,000 feet thick
Kgl, lower part. Includes medium- to massive beds of pale-gray and pastel aphanitic limestone (Peterson Limestone) and red conglomerate, red and tan sandstone, and purple, red, and green mudstone (Ephraim Conglomerate). About 1,200–2,000 feet thick

Jsp — Stump Sandstone and Preuss Redbeds
Gray, white, and pale-green calcareous sandstone, quartzite, and sandy limestone, underlain by purplish-red and maroon siltstone and fine-grained sandstone. About 1,000–2,000 feet thick

Jt — Twin Creek Limestone
Gray to dark-gray thin- to medium-bedded silty to shaly limestone. About 2,500–5,000 feet thick

Jn — Nugget Sandstone
Tan, pink, and red quartzitic and partly calcareous sandstone; weathers mainly to brown manganese-oxide-coated talus. About 900–1,600 feet thick

Ra — Ankareh Formation
As mapped includes Wood Shale Tongue of Ankareh Formation, Deadman Limestone, and Higham Grit. Consists mainly of red siltstone and mudstone. About 200–500 feet thick

Try, Tr — Thaynes Limestone
Try, Timothy Sandstone Member; gray to olive-gray fine- to coarse-grained calcareous sandstone. About 250–400 feet thick
Tr, argillaceous and silty limestone, calcareous muddy siltstone, and calcareous sandstone. About 2,500–3,200 feet thick

Trd — Dinwoody Formation
Light-grayish-brown to olive-brown claystone, gray limestone, and brown- to black-weathering siltstone. About 1,000–2,000 feet thick

Pd — Phosphoria Formation and associated rocks
Mainly cherty mudstone, phosphatic mudstone, chert, phosphorite, limestone, and dolomite. About 450–550 feet thick

PPw — Wells Formation
Sandstone, mainly quartzitic but partly calcareous, fine to very fine grained; limestone and dolomite. Includes some red mudstone near base assigned to the Amsden Formation farther east. 1,300–2,000 feet thick

Mmc — Monroe Canyon Formation
Mainly thick- to massive-bedded fine- to coarse-grained bioclastic and finely to medium crystalline limestone. Upper bed grade eastward out of the mapped area into red mudstone assigned to Amsden Formation. 900–1,300 feet thick

Mif — Little Flat Formation
Calcareous siltstone, fine-grained sandstone, and silty limestone. 400–1,000 feet thick

Ml — Lodgepole Limestone
Thin- to medium-bedded cherty fine-grained to coarsely bioclastic limestone. 700–1,000 feet thick

Mc — Brazer Limestone of Mansfield (1927)
1,600–2,000 feet thick

Mm — Madison Limestone
Similar to Lodgepole Limestone

Db — Beirdneau Formation
Gray, tan, and pink silty and sandy limestone and calcareous sandstone, and gray to dark-gray limestone and dolomite. 400–850 feet thick

Dh — Hyrum Dolomite
Dark-blue-gray, brown-weathering, petroliferous-smelling, laminated dolomite and light-gray dolomite with interbeds of limestone. 400–1,850 feet thick

Dbh — Beirdneau Formation and Hyrum Dolomite undifferentiated

Sr — Laketown Dolomite
Very light to medium gray, white-weathering, medium- to thick-bedded dolomite. 500–1,000 feet thick

Of — Fish Haven Dolomite
Dark-gray, brown-weathering, fetid thin- to medium-bedded dolomite. 500–1,000 feet thick

Osp — Swan Peak Quartzite
Well-sorted very fine to fine grained medium-bedded to massive quartzite. 500–1,200 feet thick

Ogc — Garden City Limestone
Medium-gray dolomite and dark-gray chert in upper part, grading downward to dark-gray thin- to medium-bedded limestone with bioclastic, oolitic, and intraformational conglomeratic beds. 1,150–1,350 feet thick.

Csc, Csw — St. Charles Limestone
Csc, upper part. Light- to medium-gray and brown dolomite and dark-gray limestone. 700–900 feet thick
Csw, Worm Creek Quartzite Member. Light-gray siliceous quartzite and white to pink quartzitic sandstone with interbedded light- to medium-gray dolomite. 200–900 feet thick

Cn — Nounan Limestone
Medium- to light-gray dolomite and dark-gray silty limestone and intraformational limestone conglomerate. 700–1,000 feet thick

Cbo — Bloomington Formation
Shaly micaceous green mudstone and claystone with interbeds and nodules of pastel aphanitic limestone and oolitic and intraformational conglomeratic limestone. About 1,000 feet thick

Cbl — Blacksmith Limestone
Medium-gray to buff medium- to thick-bedded limestone, partly oolitic and partly silty. 750–950 feet thick

Cbn, Cbb, Cbk — Rocks in the Bancroft area
Cbn, upper limestone unit. Thin- to medium-bedded medium-gray partly silty and mottled limestone. 300 feet thick
Cbb, middle shale unit. Mainly green, partly dark-gray to black, mudstone and light- to medium-gray limestone. 400 feet thick
Cbk, lower limestone and quartzite unit. Medium- to dark-gray medium- to thick-bedded oolitic and Girvanella-bearing limestone, and brown-weathering porous sandstone and green quartzite interbedded with limestone in lower part. 600 feet thick

Cu, Cl — Ute Limestone and Langston Formation
Cu, Ute Limestone. Thin-bedded light- to black-gray argillaceous partly oolitic limestone, pairings and interbeds of green shaly claystone. 350 feet thick
Cl, Langston Formation. Light-gray coarsely crystalline dolomite, weathering brown to reddish brown, that grades laterally into units of dark-gray partly oolitic limestone and green and dark-gray claystone. 350–600 feet thick

CpCo — Brigham Quartzite
Mainly light-gray to tan and green very poorly sorted partly conglomeratic quartzite with units of tan, green, and brown argillite; grades downward into purple quartzite. More than 2,500 feet thick; base not exposed in area

Contact
Dotted where concealed

Dx — Fault
Dotted where concealed. Dx, breccia along fault

Thrust fault
Dotted where concealed. Sawteeth on upper plate

Qb — Cones and collapse depressions in basalt

QUATERNARY — Holocene, Pleistocene
TERTIARY — Pliocene
CRETACEOUS
JURASSIC
TRIASSIC AND JURASSIC(?)
TRIASSIC
PERMIAN
PENNSYLVANIAN
MISSISSIPPIAN
CARBONIFEROUS
DEVONIAN
SILURIAN
ORDOVICIAN
CAMBRIAN
PRECAMBRIAN

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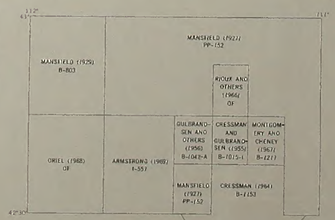

B, bulletin; I, miscellaneous geologic investigations; OF, open file; PP, professional paper

INDEX TO SOURCES OF GEOLOGIC MAP DATA

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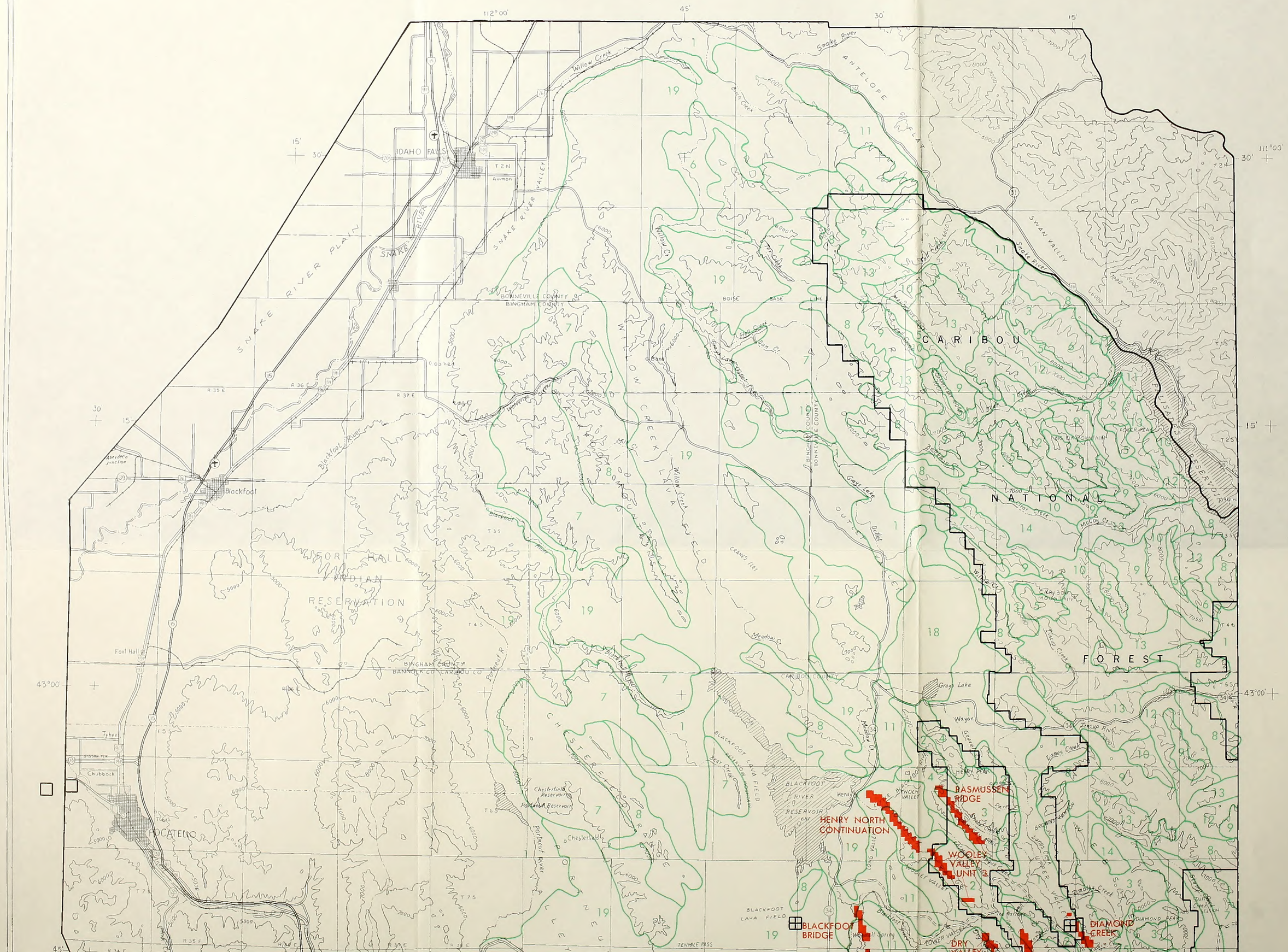
DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 4



EXPLANATION

1, Mountain valley bottomlands
2, Stable mountain sideslopes
3, Stable mountain uplands
4, Moderately stable cold foothills
5, Ridgelands
6, Stable canyonlands
7, Unstable dry foothills
8, Unstable cold foothills-sideslopes
9, Unstable mountain uplands
10, Unstable mountain sideslopes
11, Moderately stable toeslopes
12, Unstable scarp and dip uplands
13, Unstable canyonlands
14, Mountain basinlands
15, Low dip and scarp slopes
16, Rounded ridge slopes
17, Limestone talus ridges
18, Marshlands
19, Moderately stable loess-covered hills and plains

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

LANDTYPE ASSOCIATIONS, SOUTHEASTERN IDAHO

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UNITED STATES DEPARTMENT OF THE INTERIOR
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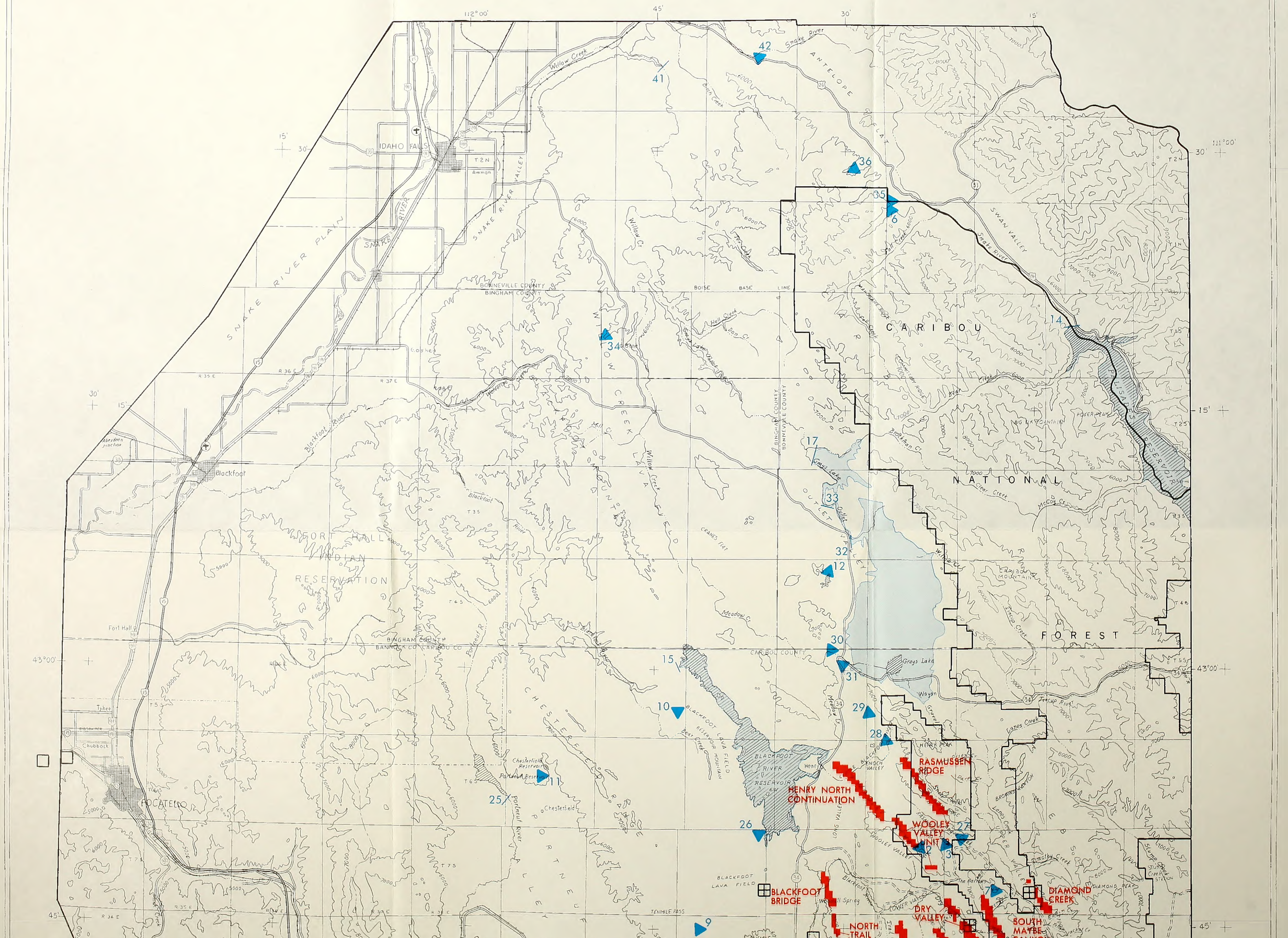
DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 5



EXPLANATION

Water Transportation

A, Taylor Canal
B, Neuffer Canal
C, Preston-Montpelier Canal
D, Bear Lake Outlet
E, West Fork Canal
F, Bear Lake Inlet
G, Georgetown Channel

Transmission

H, Georgetown pipelines

Major reservoir

Dam

1. Montpelier Dam
2. Stauffer Dam
3. Erosion control dams
4. Erosion control dam
5. Erosion control dam
6. Pancheri Dam
7. Erosion control dam
8. Soda Creek Dam
9. Sediment dam
10. Christenson Dam
11. Chesterfield (24 mile) Dam
12. Little Valley Dam
13. Sheep Creek Dam
14. Palisades Dam
15. Blackfoot Dam
16. Soda Dam
17. Gray's Lake Outlet Dam
18. Rainbow Dam
19. Stewart Dam
20. Hammond Dam
21. Bennington Dam
22. Welling Dam
23. Fife Dam
24. Red Pine Canyon Dam
25. Portneuf Dam
26. Blackfoot-China Hat Dam
27. Angus Creek Dam
28. Enders Dam
29. Houtz Dam
30. Lost Creek Dam
31. Clark Dam
32. Gray's Lake—North Outlet Dam
33. Clegg Dam
34. Bone Dam
35. Tolliver Creek Dam
36. Granite Creek Dam
37. Grace Dam
38. Cove Dam
39. Oneida Dam
40. Paris Dam
41. Ririe Dam (under construction)
42. Lynn Crandall (Burns Creek) Dam (proposed)
43. Utah Power and Light dam (proposed)

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

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DAMS AND RESERVOIRS, SOUTHEASTERN IDAHO

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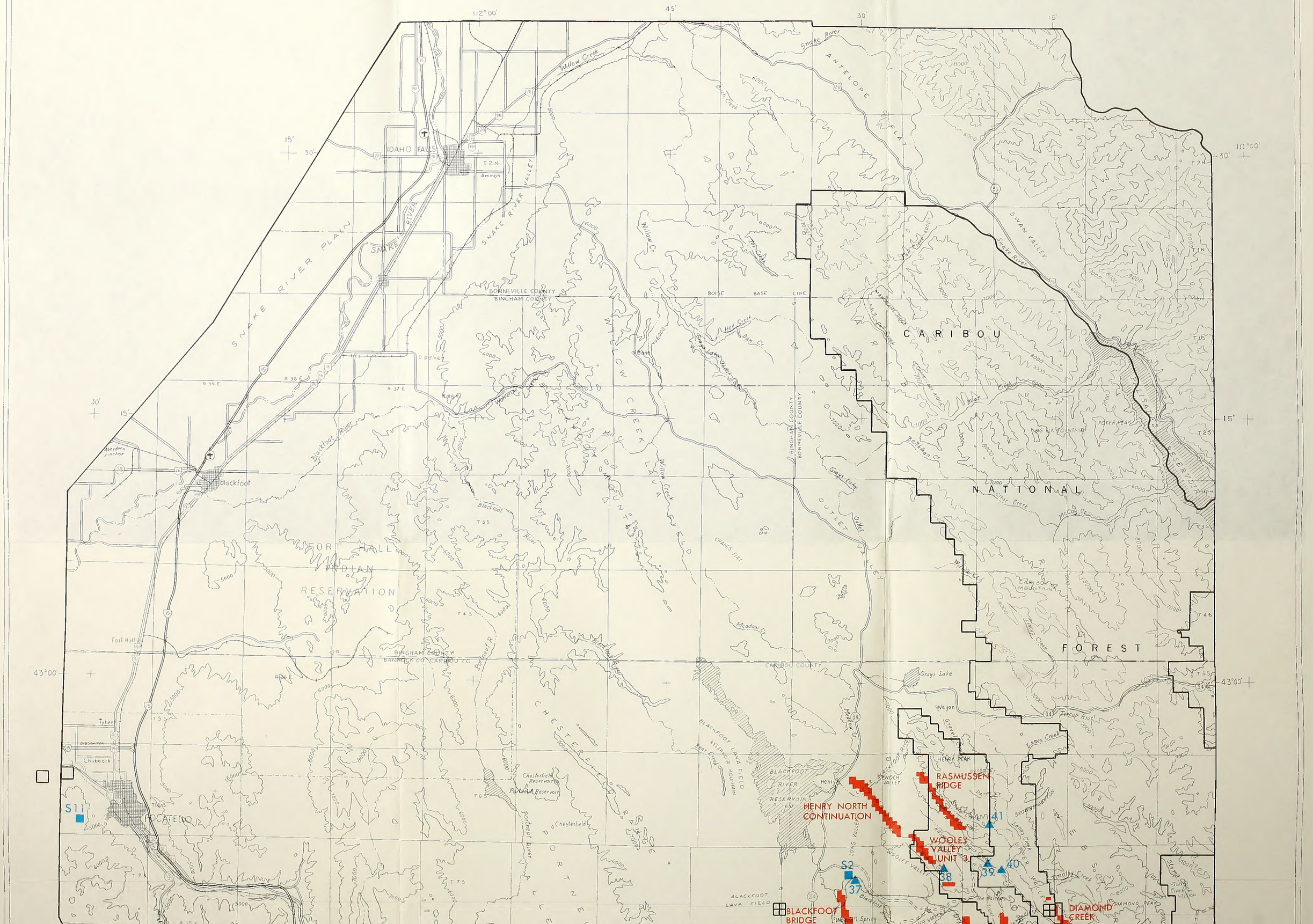
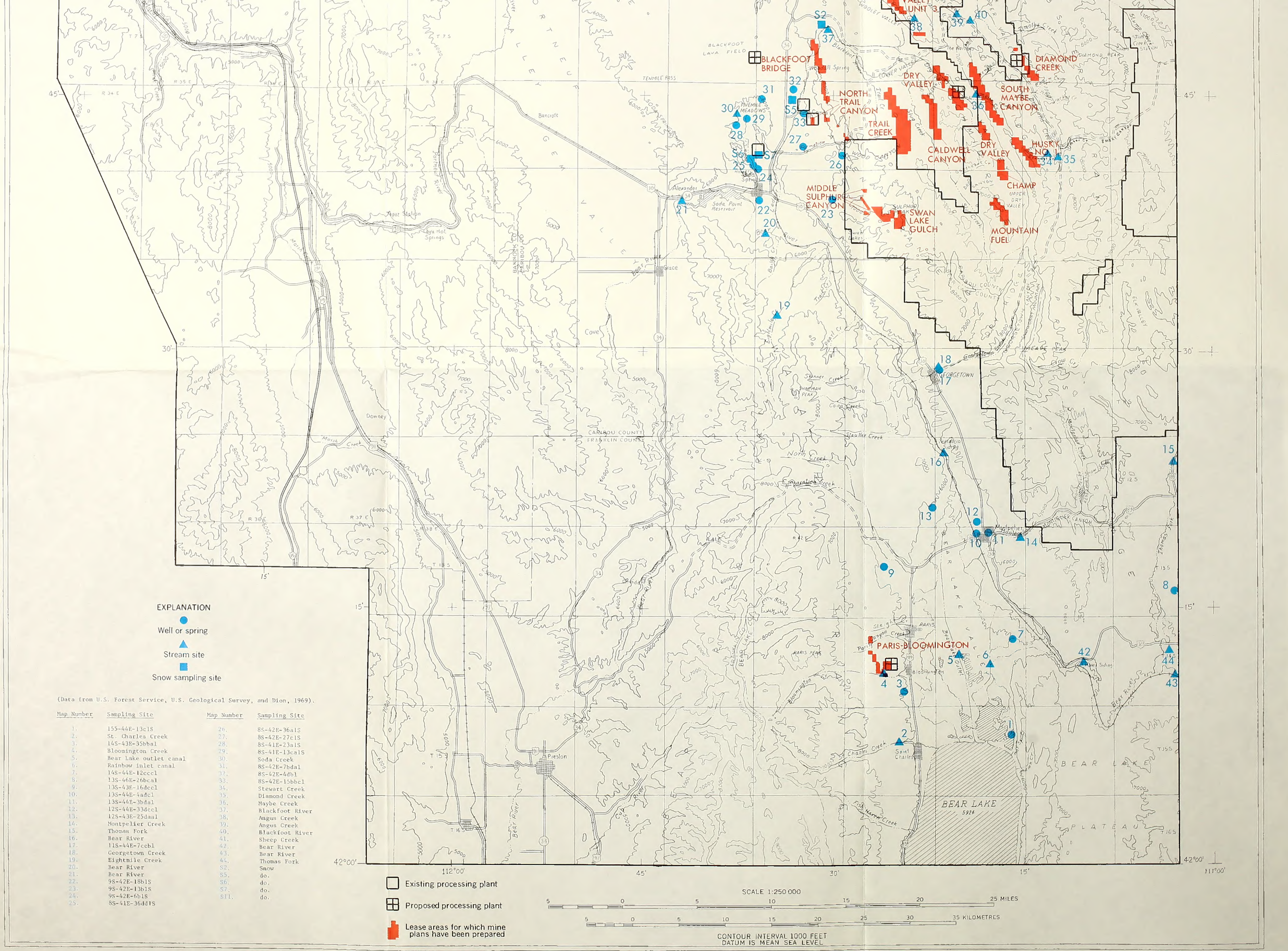
DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 6




BLACKFOOT BRIDGE
DIAMOND CREEK
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NORTH TRAIL CANYON
TRAIL CREEK
CALDWELL CANYON
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Saint Charles
Montpelier
Downey
Topaz Station
Bancroft
Cove
BEAR LAKE
BEAR LAKE 5926
CARIBOU COUNTY
FRANKLIN COUNTY
BLACKFOOT LAVA FIELD
TENMILE PASS
Portneuf River
Bear River
Blackfoot River
Soda Point Reservoir
Bear Lake
Sheman Peak
Paris Peak
Sheep Creek
Stauffer Creek
North Creek
Emigration Creek
Dry Haven Creek
Georgetown
Montpelier
Paris
Bloomington
Saint Charles
Preston
Grace
Alexander
Soda Springs
Topaz Station
Downey
Bancroft
Cove
Montpelier Junction
Georgetown Siding
Paris Siding
Bear River Siding
Bloomington Siding
Ovid Siding
Soda Springs Siding
Tenmile Meadows
Blackfoot
Wolf Tail Spring
Cover Valley
Diamond Peak
Sheep Creek
Meade Peak
Dry Valley
Upper Dry Valley
Sulphur Canyon
Swan Lake
Champ
Mountain Fuel
Husky No. 1
Bear Lake Valley
Bear River Range
Webster Range
Preuss Range
Elk Valley
Thomas Fork
Rainbow Inlet Canal
Bear Lake Outlet Canal
Bear River Canyon
Portneuf Canyon
Smoky Canyon
Stump Creek
Maybe Canyon
Diamond Creek
Trail Creek
Caldwell Canyon
Dry Valley
Husky No. 1
Champ
Middle Sulphur Canyon
Swan Lake Gulch
Mountain Fuel
Paris-Bloomington
Georgetown
Bear Lake
Bear Lake 5926
Caribou County
Franklin County
Blackfoot Lava Field
Tenmile Pass
Portneuf River
Bear River
Blackfoot River
Soda Point Reservoir
Sheman Peak
Paris Peak
Sheep Creek
Stauffer Creek
North Creek
Emigration Creek
Dry Haven Creek

UNITED STATES DEPARTMENT OF THE INTERIOR
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DEVELOPMENT OF PHOSPHATE RESOURCES
IN SOUTHEASTERN IDAHO MAP 7

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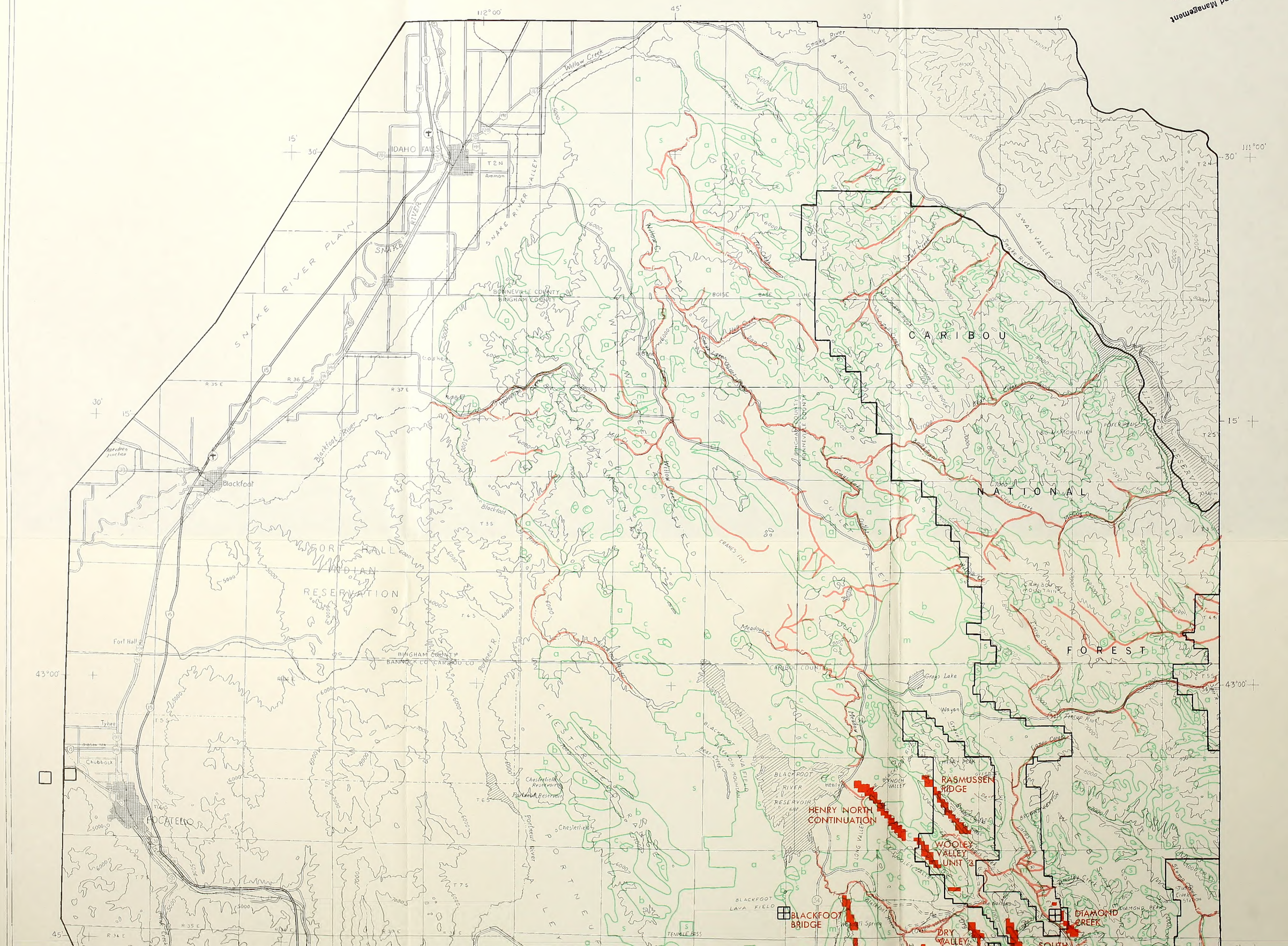

EXPLANATION

a, Agricultural

b, Mountain brush (mahogany and juniper)

c, Conifer and aspen

m, Marsh

r, Riparian

s, Sagebrush and grass

For explanation, see Part 1, Chapter II

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia

VEGETAL COVER TYPE, SOUTHEASTERN IDAHO

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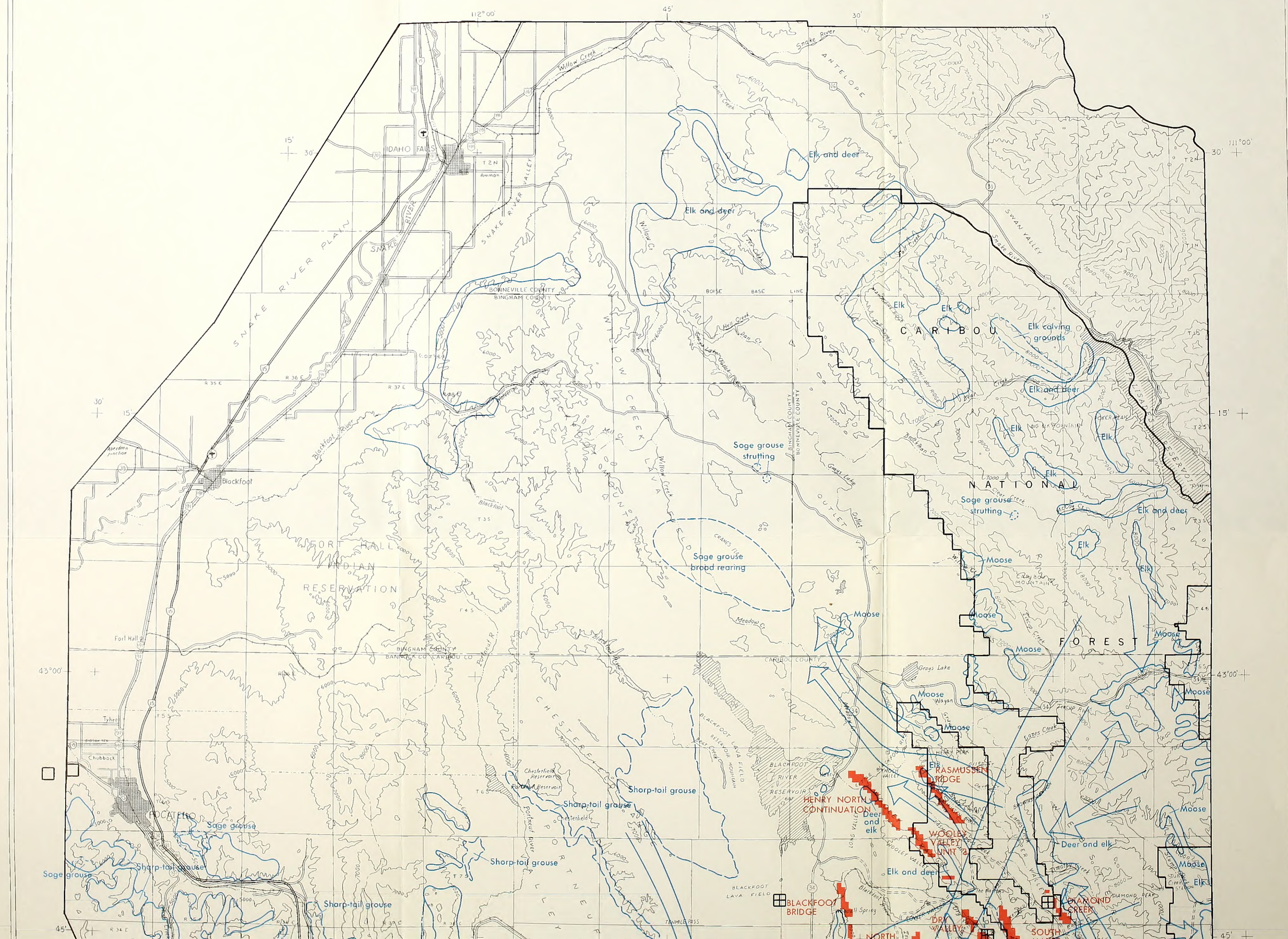
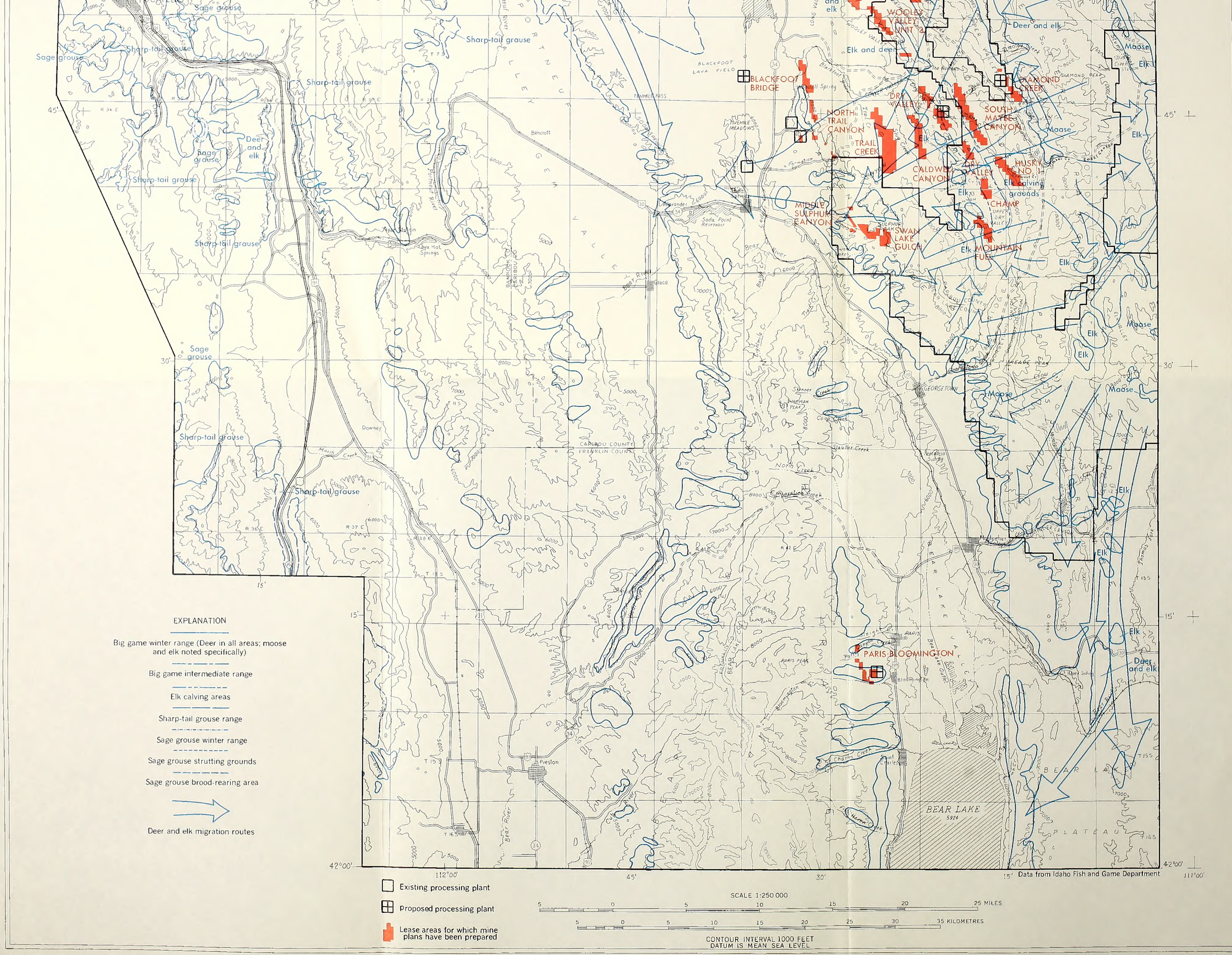
GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 8





EXPLANATION

Big game winter range (Deer in all areas; moose and elk noted specifically)

Big game intermediate range

Elk calving areas

Sharp-tail grouse range

Sage grouse winter range

Sage grouse strutting grounds

Sage grouse brood-rearing area

Deer and elk migration routes

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Data from Idaho Fish and Game Department

Interior—Geological Survey, Reston, Virginia—1977

HABITAT AND MIGRATION ROUTES OF BIG GAME AND GROUSE, SOUTHEASTERN IDAHO

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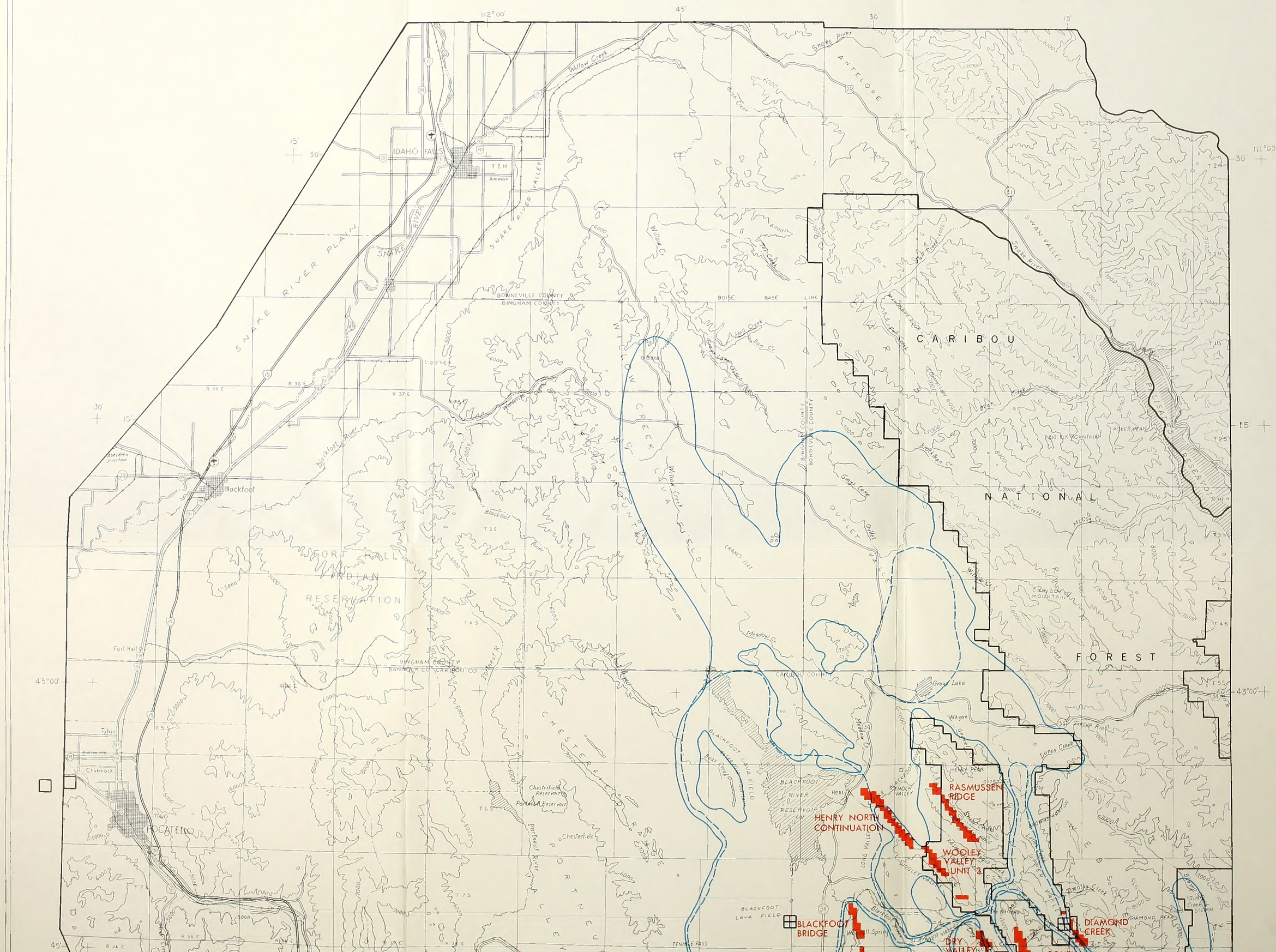
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES
IN SOUTHEASTERN IDAHO MAP 9



EXPLANATION

Primary Canada goose and duck habitat

Sandhill crane and whooping crane habitat

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Data from Idaho Fish and Game Department

Interior—Geological Survey, Reston, Virginia—1977

HABITAT OF WATERFOWL AND CRANES, SOUTHEASTERN IDAHO

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GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES IN SOUTHEASTERN IDAHO MAP 10

HISTORICAL AND ARCHEOLOGICAL SITES, SOUTHEASTERN IDAHO

EXPLANATION

Historic Trails

- Oregon Trail
- Old Oregon Trail
- California Trail
- Lander Trail
- Sublette Trail
- Wyeth's Trail
- Zenus

National Register Sites

- Cluster (Architecture)
- Single site

Archeological Sites

- Burials
- Open sites
- Rock shelters and caves
- Tested sites

- Existing processing plant
- Proposed processing plant
- Lease areas for which mine plans have been prepared

BLACKFOOT BRIDGE
DRY VALLEY UNIT 3
DIAMOND CREEK
DRY VALLEY
SOUTH MAYBE CANYON
NORTH TRAIL CANYON
TRAIL CREEK
CALDWELL CANYON
DRY VALLEY
HUSKY NO. 1
CHAMP
MIDDLE SULPHUR CANYON
SWAN LAKE GULCH
MOUNTAIN FUEL
PARIS-BLOOMINGTON
BEAR LAKE 5924

SCALE 1:250 000
5 0 5 10 15 20 25 MILES
5 0 5 10 15 20 25 30 35 KILOMETRES
CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

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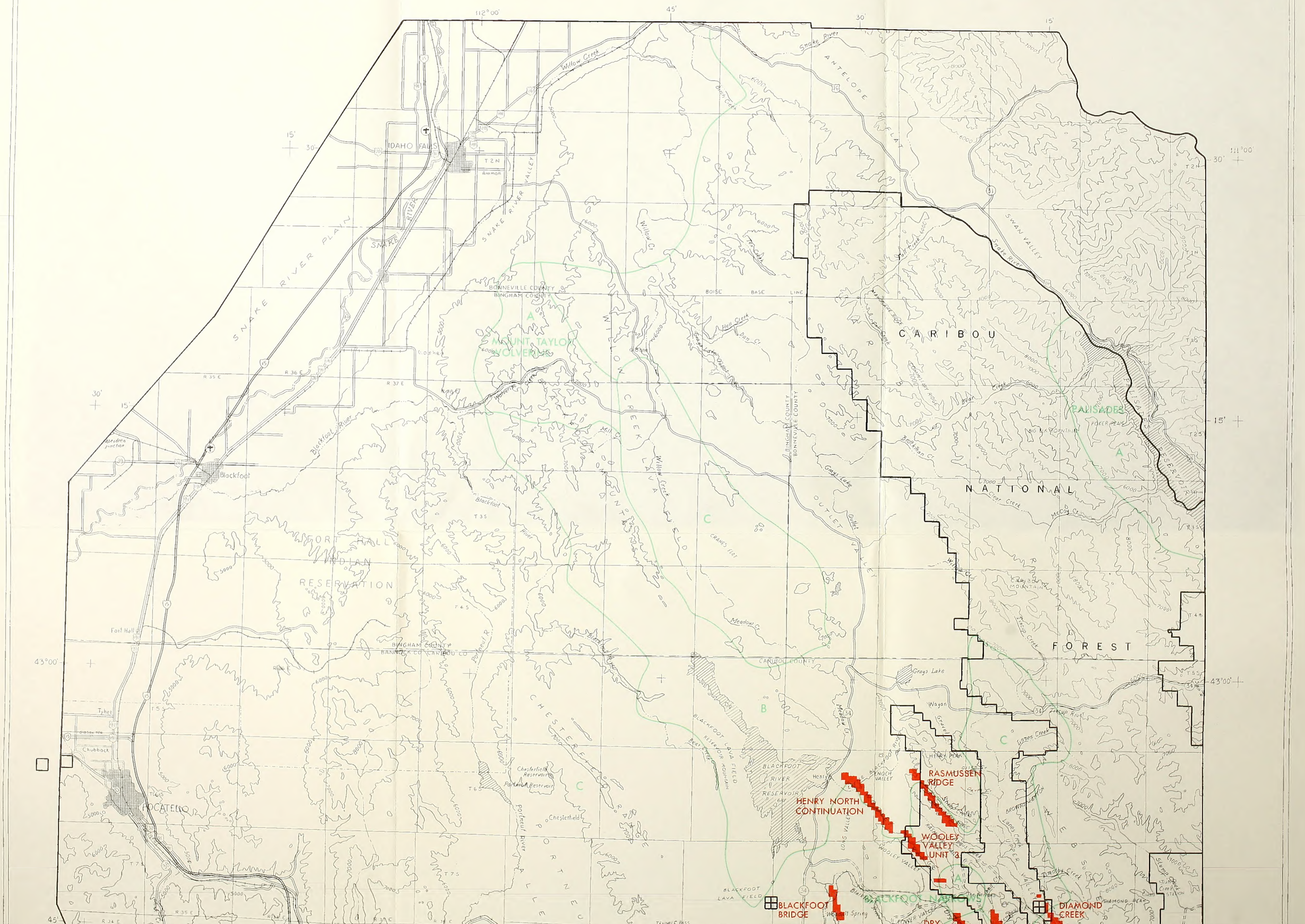
GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES
IN SOUTHEASTERN IDAHO MAP 11



WOOLEY VALLEY UNIT 3

BLACKFOOT BRIDGE

DIAMOND CREEK

DRY VALLEY

NORTH TRAIL CANYON

SOUTH MAYBE CANYON

TRAIL CREEK

CALDWELL CANYON

DRY VALLEY

HUSKY NO. 1

CHAMP

MIDDLE SULPHUR CANYON

SWAN LAKE GULCH

MOUNTAIN FUEL

PARIS BLOOMINGTON

BEAR LAKE

EMIGRATION CANYON

MONTPELIER CANYON

EXPLANATION

A, distinctive

B, common

C, minimal

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

AESTHETIC VARIETY CLASSES OF SCENIC QUALITY, SOUTHEASTERN IDAHO

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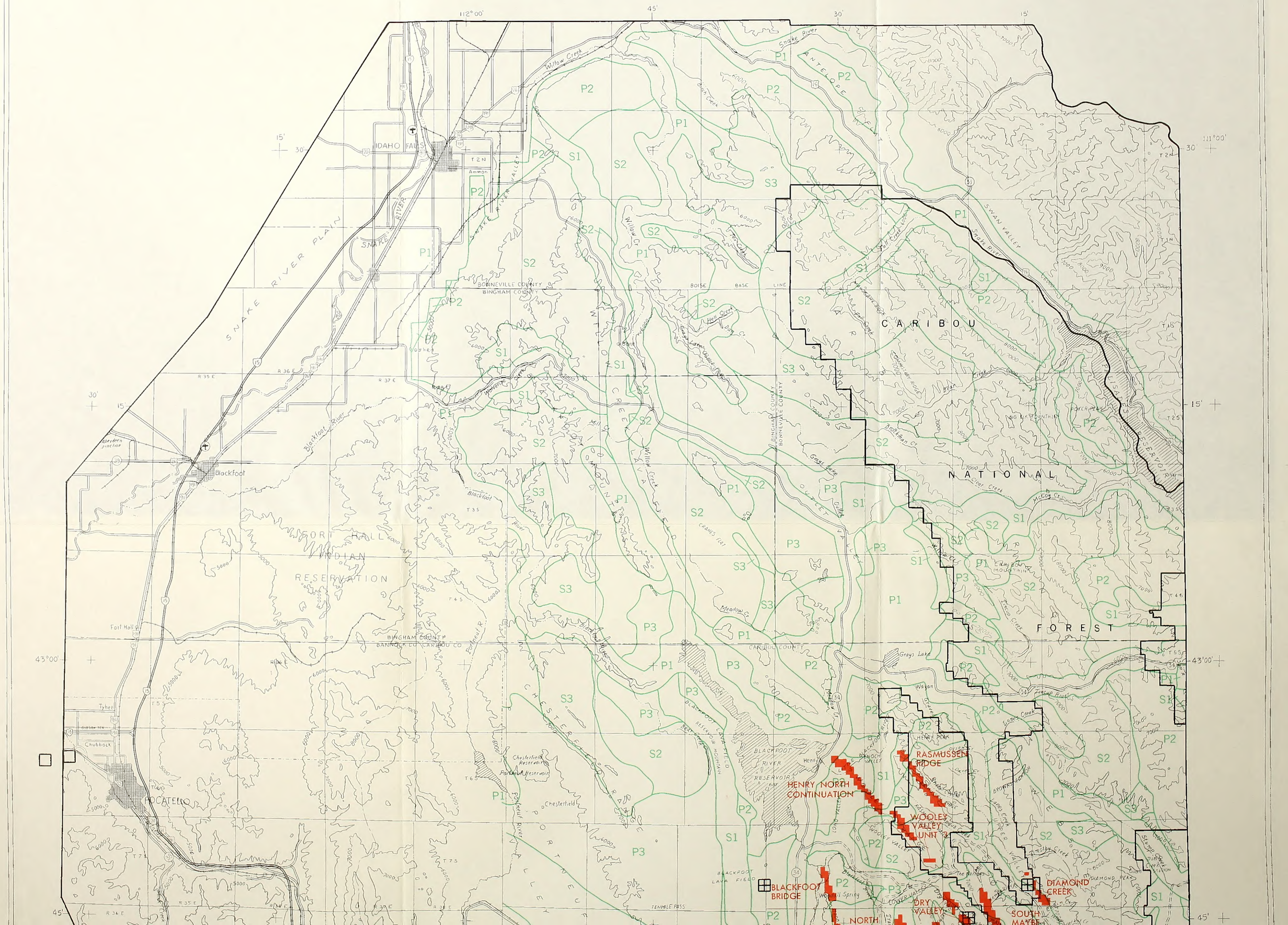
GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES
IN SOUTHEASTERN IDAHO MAP 12



EXPLANATION

From primary viewing areas:

P1, foreground

P2, middleground

P3, background

From secondary viewing areas:

S1, foreground

S2, middleground

S3, background

Areas without labels are out of sight from viewing areas

For explanation, see Part 1, Chapter II

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

Interior—Geological Survey, Reston, Virginia—1977

AESTHETIC VIEWING ZONES, SOUTHEASTERN IDAHO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEVELOPMENT OF PHOSPHATE RESOURCES
IN SOUTHEASTERN IDAHO MAP 13

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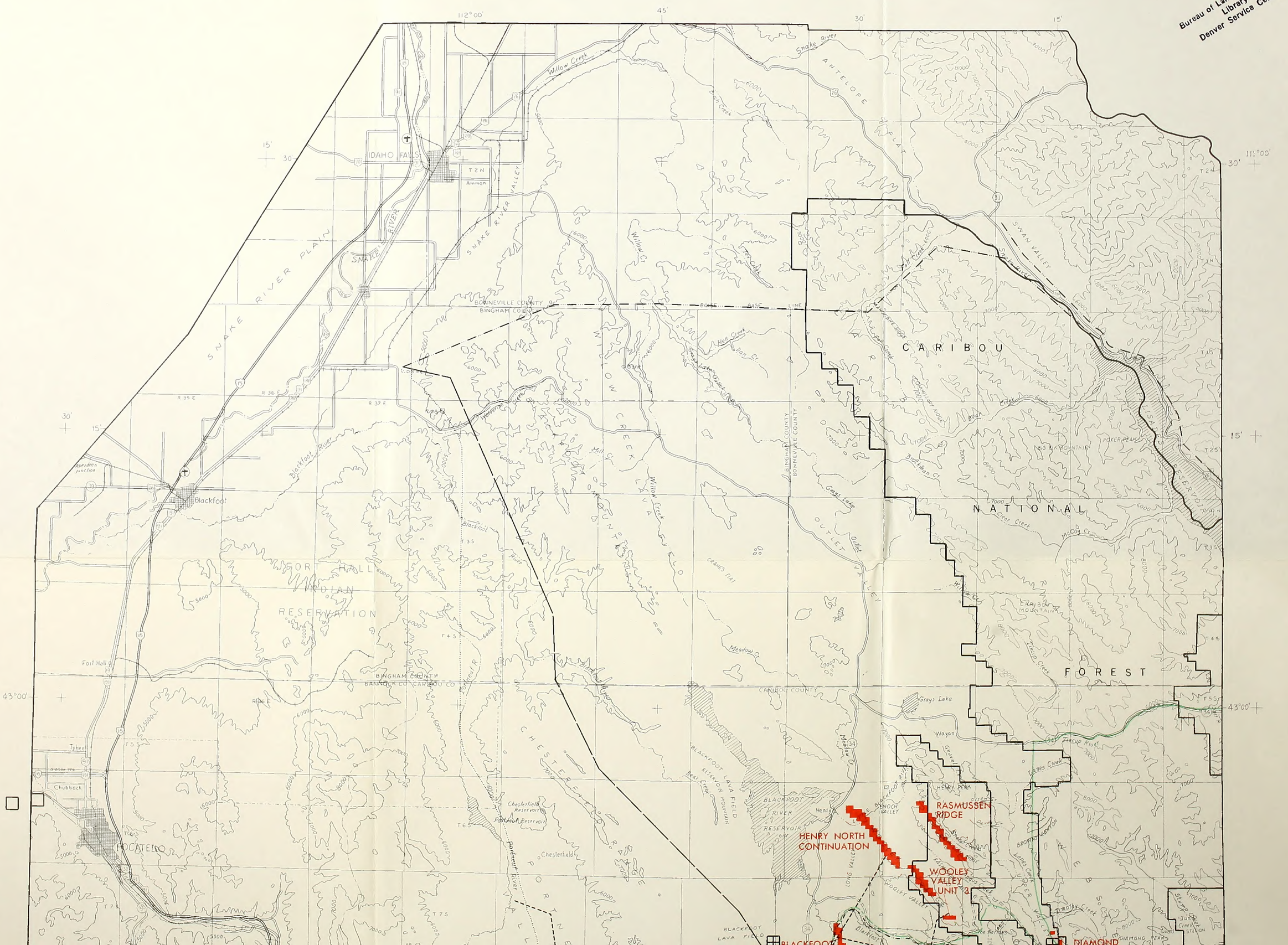

EXPLANATION

Transmission lines

- 46 KV
- 230 KV
- 69 KV
- 138 KV
- 345 KV
- 161 KV
- 115 KV
- Proposed 345 KV
- Under construction 345 KV

Power lines (Proposed)

- Primary
- Alternate

Natural gas lines (Proposed)

- Primary
- Alternate

Existing processing plant

Proposed processing plant

Lease areas for which mine plans have been prepared

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

CONTOUR INTERVAL 1000 FEET
DATUM IS MEAN SEA LEVEL

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TRANSMISSION AND PROPOSED POWER AND NATURAL GAS LINES, SOUTHEASTERN IDAHO

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volume IV

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